	Application No.	Applicant(s)
Notice of Allowability	10/052,122	NISHIDA ET AL.
	Examiner	Art Unit	
	Charlotte M. Baker	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Election dated 01/17/2006*.

2. ☒ The allowed claim(s) is/are *2-5,9-11,15-18 and 21-24*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date *07/12/2004*

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

KAWilliams

KIMBERLY WILLIAMS

SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

John M. Del Vecchio (42,475) on 01/26/2006.

2.   The applications has been amended as follows:

The following claims are cancelled: 1, 6-8, 12-14 and 19-20 (claims 1, 8, and 14 were

cancelled in Preliminary Amendment filed on 01/17/2002).

3.   Authorization for this examiner's amendment was given in a telephone interview with

John M. Del Vecchio (42,475) on 01/30/2006.

4.   The applications has been amended as follows:

In claims 15-18, replace "A recorded medium recording therein" with --A computer

readable medium recording therein--.

5.   Authorization for this examiner's amendment was given in a telephone interview with

John M. Del Vecchio (42,475) on 02/01/2006.

6.   The applications has been amended as follows:

In claims 23-24, replace "The recorded medium recording therein" with --The computer

readable medium recording therein--.

In claim 5, replace "distribution mount" with --distribution amount--.

In claim 16, replace "correcting the look-tip table" with --correcting the look-up table--.

Allowable Subject Matter

7.   Correction to the record: it is noted that both Applicants and Examiner made an error in the claims pending in the application due to the Preliminary Amendment filed on 01/17/2002 not being considered. Therefore, the claims elected without traverse by Applicants are as follows: 2-5, 9-11, 15-18 and 21-24.

8.   Claims 2-5, 9-11, 15-18 and 21-24 are allowed.

9.   The following is an examiner's statement of reasons for allowance: claims 2, 9 and 15, 21 and 23 are allowed over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of said prior art which teaches a color proofing method, color proofing apparatus, or color proofing program as claimed in the following:

determining a paper exposed area factor α in accordance with the following equation when arbitrary reference data P in the look-up table has color values (Cp, Mp, Yp, Bkp), each of which is N-bit data:

$\alpha = (1-Cp/(2^N-1)) \times (1-Mp/(2^N-1)) \times (1-Yp/(2^N-1)) \times (1-Bkp/(2^N-1))$, in contrast,

determining the paper exposed area factor α in accordance with the following equation when the arbitrary reference data P has the in the look-up table has the color values (Cp, Mp, Yp, Bkp), each of which is percentage data:

$\alpha = (1-Cp/100) \times (1-Mp/100) \times (1-Yp/100) \times (1-Bkp/100)$; and

determining corrected values (Ci', Mi', Yi', Bki') of color values (Ci, Mi, Yi, Bki) of arbitrary reference data I in the look-up table in accordance with the following equations wh\en

color values (Ca, Ma, Ya, Bka) of the printing paper for the printing press are added to a part

where a paper exposed area factor is 100%:

$$Ci' = Ci + Ca \times \alpha, Mi' = Mi + Ma \times \alpha, Yi' = Yi + Ya \times \alpha \text{ and } Bki' = Bki + Bka \times \alpha, \text{ to}$$

thus replace the color values of the reference data with the corrected values.

10.   Bestmann (5,835,244) discloses a method and apparatus for the conversion of color

values for the purpose of adaptation to a printing process with which printing tables can be

produced with high precision for achieving a high reproduction quality. Bestmann fails to

specifically address the invention as claimed.

11.   Usami et al. (5,781,709) disclose a method of and an apparatus for producing a color

proof which will allow an image output device to provide a printed color document properly

corrected for colors. Usami et al. fail to specifically address the invention as claimed.

12.   Spence (5,333,069) discloses an apparatus and associated methods for use in a proofing

system to provide an appearance match between a press sheet and a proof. Spence fails to

specifically address the invention as claimed.

13.   Claims 3, 16, 22 and 24 are allowed over the prior art of record because the Examiner

found neither prior art cited in its entirety, nor based on the prior art, found any motivation to

combine any of said prior art which teaches a color proofing method, or color proofing program

as claimed in the following:

14.   creating a look-up image data over entire containing converted color space respect

proof correcting look-up table based color of printing paper for the printing press and a paper

exposed area factor in the proof print; making proof print by use of the corrected look-up table;

in the case where the proof print produced based on both of density gradation and area gradation

and the colors of the printing for the printing press and a printing paper for the proof press are

approximated to each other to such an extent as not need take the ink transmittance into account,

the step of correcting the look-up table includes the steps of: specifying an influence range

defining how far reference data is influenced in the color space when the color values of the

printing paper for the printing press are added to the color space; and determining an influence

value for each of the reference data based on the color values of the paper and the value of the

influence range, to thus add the influence value to the reference data.

15.   Bestmann (5,835,244) discloses a method and apparatus for the conversion of color

values for the purpose of adaptation to a printing process with which printing tables can be

produced with high precision for achieving a high reproduction quality. Bestmann discloses

calculation of a print table and calibration of a print table and producing a proof of the test table.

Bestmann fails to specifically address the invention as claimed.

16.   Usami et al. (5,781,709) disclose a method of and an apparatus for producing a color

proof which will allow an image output device to provide a printed color document properly

corrected for colors. Usami et al. disclose color shift corrected by a color shift correcting LUT

and generating a color proof that accurately reproduces colors and image structure of the printed

color document. Usami et al. fail to specifically address the invention as claimed.

17.   Spence (5,333,069) discloses an apparatus and associated methods for use in a proofing

system to provide an appearance match between a press sheet and a proof. Spence discloses

calibration of one imaging system to another in a fat manner. Spence fails to specifically address

the invention as claimed.

18.   Claims 4-5, 11 and 17-18 are allowed over the prior art of record because the Examiner

found neither prior art cited in its entirety, nor based on the prior art, found any motivation to

combine any of said prior art which teaches a color proofing method, color proofing apparatus,

or color proofing program as claimed in the following:

19.   determining corrected values (Ci', Mi', Yi', Bki') of color values (Ci, Mi, Yi, Bki) of

arbitrary reference data I in the look-up table in accordance with the following equations when

color values (Ca, Ma, Ya, Bka) of the printing paper for the printing press are added to a part

where a paper exposed area factor is 100%, wherein address values (Cid, Mid, Yid, Bkid)

express the color values (Ci, Mi, Yi, Bki) by N-bit:

$$Ci' = Ci + Ca \times (1\text{-}Cid/ (2^N\text{-}1) \times Mid/ (2^N\text{-}1) \times Yid/ (2^N\text{-}1) \times Bkid/ (2^N\text{-}1));$$

$$Mi' = Mi + Ma \times (1\text{-}Cid/ (2^N\text{-}1) \times Mid/ (2^N\text{-}1) \times Yid/ (2^N\text{-}1) \times Bkid/ (2^N\text{-}1));$$

$$Yi' = Yi + Ya \times (1\text{-}Cid/ (2^N\text{-}1) \times Mid/ (2^N\text{-}1) \times Yid/ (2^N\text{-}1) \times Bkid/ (2^N\text{-}1)); \text{ and}$$

$$Bki' = Bki + Bka \times (1\text{-}Cid/ (2^N\text{-}1) \times Mid/ (2^N\text{-}1) \times Yid/ (2^N\text{-}1) \times Bkid/ (2^N\text{-}1));$$

to thus replace the color values of the reference data with the corrected values.

20.   Bestmann (5,835,244) discloses a method and apparatus for the conversion of color

values for the purpose of adaptation to a printing process with which printing tables can be

produced with high precision for achieving a high reproduction quality. Bestmann fails to

specifically address the invention as claimed.

21.   Usami et al. (5,781,709) disclose a method of and an apparatus for producing a color

proof which will allow an image output device to provide a printed color document properly

corrected for colors. Usami et al. fail to specifically address the invention as claimed.

22.   Spence (5,333,069) discloses an apparatus and associated methods for use in a proofing

system to provide an appearance match between a press sheet and a proof. Spence fails to

specifically address the invention as claimed.

23.   Claim 10 is allowed over the prior art of record because the Examiner found neither prior

art cited in its entirety, nor based on the prior art, found any motivation to combine any of said

prior art which teaches a color proofing apparatus as claimed in the following:

a look-up table creating section for creating a look-up table including converted values of

image data over the entire color space with respect to the proof press; a noise strength and

distribution amount input section for setting the noise strength and distribution amount indicating

the level of a variation of the color of printing paper for the printing press; a paper color input

section for specifying the color of the printing paper for the printing press; a look-up table

correcting section for correcting the look-up table based on the color inputted to the paper color

input section and a paper exposed area factor in the proof print and an image data converting

section for changing the image data converted by the use of the look-up table corrected by the

look-up table correcting section based on the noise strength and distribution amount input

section, to thus output the changed image data in the case where the proof print is produced

based on both of density gradation and area gradation and the colors of the printing paper for the

printing press and a printing paper for the proof press are approximated to each other to such an

extent as not to need to take the ink transmittance into account, the look-up table correcting

section includes:

influence range input section for specifying an influence range defining how far reference

data is influenced in the color space when the color values of the printing paper for the printing

press are added to the color space; an influence value calculating section for determining an

influence value each of the reference data based on the color values of the paper and the value of

the influence range, to thus add the influence value to the reference data.

24.   Bestmann (5,835,244) discloses a method and apparatus for the conversion of color

values for the purpose of adaptation to a printing process with which printing tables can be

produced with high precision for achieving a high reproduction quality. Bestmann fails to

specifically address the invention as claimed.

25.   Usami et al. (5,781,709) disclose a method of and an apparatus for producing a color

proof which will allow an image output device to provide a printed color document properly

corrected for colors. Usami et al. fail to specifically address the invention as claimed.

26.   Spence (5,333,069) discloses an apparatus and associated methods for use in a proofing

system to provide an appearance match between a press sheet and a proof. Spence fails to

specifically address the invention as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Charlotte M. Baker whose telephone number is 571-272-7459.

The examiner can normally be reached on Monday-Friday 8:30-5:00.
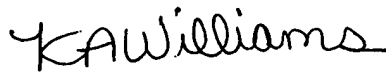
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kimberly A. Williams can be reached on 571-272-7471. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CMB

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER